

Title (en)

Film/Screen system and image-forming system for use in direct X-ray applications

Title (de)

System von Film und Schirm und System zur Herstellung eines direkten radiographischen Bildes

Title (fr)

Système pellicule/écran et système formant image pour utilisation en radiographie directe

Publication

EP 1195641 B1 20041229 (EN)

Application

EP 01000464 A 20010914

Priority

- EP 01000464 A 20010914
- EP 00203440 A 20001004

Abstract (en)

[origin: EP1195641A1] A direct X-ray system for industrial radiography, like non-destructive testing applications, and personal monitoring, being particularly less sensitive to pressure phenomena, has been disclosed, said system consisting of a direct X-ray black-and-white negative-working radiographic film material, comprised of a transparent support coated on at least one side thereof with a tabular grain emulsion layer, substantially free from spectrally sensitizing dyes, in which at least 50 percent of total grain projected area of all grains is accounted for by silver bromiodide tabular grains having an iodide content of less than 5 mole %, based on silver, having an average aspect ratio of at least 2, and having a volume greater than $0.03 \mu\text{m}^3$, further characterized in that said tabular grain emulsion layer(s) comprise(s), in an amount of from 5 mg up to 100 mg per mole of coated silver bromiodide at least one desensitizing agent having a hetero-aromatic part and an electron-withdrawing group and (2) disposed on opposite sides of the radiographic element, two intensifying screen sheets selected from the group consisting of lead, lead oxide, copper and steel, said screen sheets having been designed in order to emit electrons when exposed to X- or Y-rays with an energy greater than or equal to 10 kvp.

IPC 1-7

G03C 1/005; **G03C 1/36**; **G03C 5/17**

IPC 8 full level

G03C 1/005 (2006.01); **G03C 1/36** (2006.01); **G03C 5/17** (2006.01); **G03C 5/16** (2006.01); **G03C 5/30** (2006.01)

CPC (source: EP)

G03C 1/0051 (2013.01); **G03C 1/36** (2013.01); **G03C 5/17** (2013.01); **G03C 5/16** (2013.01); **G03C 5/30** (2013.01); **G03C 2001/0055** (2013.01); **G03C 2005/3007** (2013.01); **G03C 2007/3025** (2013.01)

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 1195641 A1 20020410; **EP 1195641 B1 20041229**

DOCDB simple family (application)

EP 01000464 A 20010914